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CENTRAL INTELLIGENCE AGENCY REPORT NO. [redacted]

INFORMATION REPORT

CD NO.

COUNTRY	USSR (Leningrad MD)	DATE DISTR.	28 Dec. 1949
SUBJECT	Flugov Plant No. 117 and Red October Plant No. 466 in Leningrad	NO. OF PAGES	6
	25X1A		
PLACE ACQUIRED	[redacted]	NO. OF ENCLS. (LISTED BELOW)	3
DATE OF INFO.	[redacted]	SUPPLEMENT TO REPORT NO.	25X1A [redacted]

25X1X

[redacted]

1. Plant Location and Layout:

The Flugov Plant No 117 is located in LENINGRAD (30°20'E/59°58'N) near the Nevka River on Karl Marx Street but is entered from Flugov Street (see Annexes 1 and 2).

2. Plant History:

The plant was in operation before the war. The pre-war production could not be learned. It suffered little damage during the war. Plant No 117 worked in close connection with the Red October Plant No 466, LENINGRAD (see Annex 1). These plants exchanged machinery and other equipment. The detailed PWs also came from the factory camp of Plant No 466. The PWs supposed that the Red October Plant was to become a part of the Flugov Plant or a subsidiary of it.

3. Management:

Plant No 112 was assigned to the M.A.P. (Ministry of Aviation) aircraft engines department. This designation was printed on letter heads, cases, etc.

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Manager: Engineer SCHUBER, who is not a technical expert. A foreman acted for him. The PWs did not see any engineer specialists.

4. Work Force: 1,200 to 1,500 working two shifts of eight hours each.

5. Production:

Main products were turbojet aircraft parts. Although interested in finding out if turbojet engines were completed in the plant, 25X1X none [redacted] learned where the assembled turbojet engines which arrived at the Red October Plant on black-covered trucks for test runs were produced. Some workshops were off limits to the 25X1X PWs. [redacted] early in the morning a loaded truck was parked there, leaving about 9 a.m. for the Red October. 25X1X [redacted] heard the engine running on the test stands of the Red October Plant. The loaded truck returned in the afternoon, apparently bringing the turbojet engine.

25X1X [redacted] could not observe where the parts pre-fabricated in the factory were taken or assembled; nor could they learn whether there was another plant which assembled the aircraft engines. Information on the rate of production was not available.

6. Deliveries from Other Plants:

The iron used in the plant was said to be supplied by a LENINGRAD combine which allegedly also owned an extensive foundry. Much waste material came from the foundry where the blades and turbine wheels were manufactured. [redacted] did not observe bottlenecks in 25X1X the production or any scarcity of material. The workers repeatedly said that the Flugov Plant would become independent of the Red October Plant.

25X1X

7. Construction Work:

[redacted] survey work was being done in front of the entrance of the Flugov Plant. According to statements by the engineers, a new building was to be constructed. Construction work had not been started, nor could the size be determined from the base stakes.

8. Air Defense Measures: Not observed.

25X1X 9. A railroad spur track was not available.

10. [redacted] passed an AA gun emplacement (Annex 1). Four groups of three guns each had been openly emplaced in the ground. The guns were covered with tarpaulins and were about the size of the German 88-mm guns. Near the guns large trucks were parked which, [redacted] surmised 25X1X may have contained generating units as well as instruments equipped with a funnel which was not made of sheet iron but of a netting 25X1X of rods. [redacted] believed these apparatus were used for radar purposes.

3 Annexes: (1) Flugov Plant No 117 and Red October Plant No 466 in LENINGRAD
(2) Flugov Plant No 117 in LENINGRAD
(3) Flugov Plant No 117 and Red October Plant No 466 in LENINGRAD.

Legend to Annex 2:

A Flugov Plant

1 Four-story administrative building, about 130x42 feet

2 Guardroom for factory police

3 Workshop, designated Flugov-San-Tekh where most PWs finally had to work.

4 Two large gasoline containers embedded in the ground, each about 11½x46 feet. The tanks were covered by a sand layer about 3 feet thick. One tank contained petroleum, the other gasoline

5 One boiler, about 16½x33 feet, welded of sheet iron, black, filled with gasoline. The boiler was surrounded by a one-brick 1.6 foot wall.

6 Small stone building, gasoline distributing point

7 Colors, lacs, and acids storage

8 Cement and roofing felt storage

9 Coal dump, 33 to 50 feet

10 Old boilerhouse with a brick chimney about 100 feet high. It contained four furnaces and, allegedly, three turbines.

11 "Section I". This workshop had been constructed before the war and was formerly used as a hammer mill. New partition walls were inserted and other reconstruction work done.

Section a was not completed. The ferro-concrete corner pillars were erected, but the sidewalls had not been constructed, and the roof was still lacking. Its use could not be ascertained.

Section b, an old brick workshop. The machinery, packed in 10 to 16 foot boxes, was stored in the shop. Two high foundations and one drainage shaft were being constructed. The foundations were furnished with stages. The height of the first stage was about 11½ feet; higher up an iron concrete ceiling, about two feet thick, crossed the room. The large overseas boxes were taken to that floor. Four Russian electromotors were in the hall. It was learned from Soviets that it was planned to construct testing stands here to make the Flugov Plant independent of the Red October factory! As this rumor could not be confirmed, it may represent the personal view of some Soviet workers.

Section c. The foundations of the former steam hammers were in this room. The PWs had to break and remove about 350 cubic yards of iron concrete. New ones were there prepared and excavations were made down to a depth of about 12 feet. Further details could not be furnished. 25X1X

Section d. Slagstone slabs for the construction of the factory, tiles, and other parts were produced. [redacted] this provisional outfit was to be dismantled and the building to be used for plant purposes. As long as the PWs were present, this work was not started. A small boiler plant was also located in section d., used for drying the manufactured parts for concrete construction. Office rooms were on the third floor of the building. It could not be ascertained what later use was to be made of this building.

Section e. Four-story administrative building.

12 65x100 foot connection between the old boiler house and the new one, still under construction. This building had a passage on one side and small chambers, each about 6½x10 feet, under construction on the other side. These chambers were divided by iron concrete walls, 2 to 2½ feet thick.

13 New boilerhouse furnished with three to four turbines supplying only the plant. Power disturbances which lasted several days occurred in 1947. Since the plant has been able to generate its own power in case of emergency, such interferences have been avoided. An extension was being constructed, which apparently was to be used for the coal elevator.

14 Foundry and hardening shop, 490 to 660 feetx 200 feet. The shop was equipped with two casting furnaces in which aluminum and bronze were cast. The bars arrived on trucks.

15 Hardening shop, furnished with about 18 light and 4 heavy hardening furnaces which were heated with oil and operated by turns. An electrical workshop and offices were upstairs.

16 Two old buildings, partially under reconstruction

17 Experimental station, about 100x130 feet, for aluminum welding. Aluminum was autogenously welded at five places where three women and two men worked. They welded aluminum rods which were forwarded to object 18.

18 Material testing laboratory. Iron and steel were checked and breaking tests made with aluminum and welded aluminum.

19 Five-story high red building, about 130x130 feet. A plate fixed to the entrance was inscribed: "Chemical Metallurgical Laboratory"

20 A building where light of welding apparatus could be seen day and night. In case engines were actually assembled in this plant, only the buildings No 19 and 20 could be used. Management and political section were on the upper floor.

21 Manufacture of welding electrodes

22 A wooden extension of building 21 where obsolete, unused machinery was stored

23 Transformer station for the current generated by the factory-owned power plant

24 Two large earth bunkers

25 Sheet iron storage shed, about 10x15 feet

26 Fire brigade

27 Transformer station with 12 to 14 compartments. The current reached the plant by a 35,000-kw overhead line. In 1945, when the power supply often failed, the Soviets stated that a large power plant on Lake Peipus had been destroyed by frost.

28 Garage and repair shop, about 20 trucks

29 Allegedly an electric test station. Material was allegedly being X-rayed and tested.

30 Designated as "Hall No 33", the largest hall of the plant, about 1,000x250 to 300 feet, an old building with the following sections:

a Percussion cutters shearing sheet metal for construction of jigs and fixtures and four hardening or annealing furnaces for working sheet steel.
Sheet metals 0.02 inches thick for electromotors and household utensils (locks, keys and condensing coils) were manufactured there.
These pipes were allegedly for aircraft oil radiators

b Instrument workshop

c Large turning and milling shop. The machinery was arranged in rows of three to ten machines. Sources remembered about 200 turning lathes, 50 shapers, 40 special milling machines for worm and bevel wheels, five magnetic surface grinding machines and an unknown quantity of heavy and light cylinder grinding machines.

d Office room and storage of tools and finished parts

e Turbine grinding shop. Turbo vanes which had been cast in the factory-owned foundry (see Annex 3) were worked.

f Turning lathes and planing machines. Section was similar to section a, but was furnished with less, but larger, machinery. The outfit had four heavy Kaboma boring mills, three to four Italian and six to eight French turning lathes, three to four shapers, three four-spindle boring machines, five new Wanderer gear shapers. The machinery was excellently kept and was in good working condition. Source estimated 90 percent of the plant equipment to be of primary value. From plates on the machines it was learned that they came from an Arado Plant (location not indicated); some machines were designated as Junkers machines. In section f, three shifts worked intensively. Here the vanes described in Annex 3 were surfaced and centrically hollowed out; besides, steel shafts, about 30 x 3 inches, were worked. It could not be learned where the finished parts were taken. It was rumored that they were forwarded to the Red October factory.

The office rooms , management etc. were located over sections a and c; over the sections e and f were the workshops of the SKU 12 reconstruction trust. The fourth floor contained office rooms.

B Karl Marx Street

C Flugov Street

Legend to Annex 3:

a and b — Discs of different sizes (diameters between 24 and 48 inches). Total height of the basic discs about 20 to 25 mm. Webs 8 to 10 mm thick and discs with a diameter of 32 to 36 inches bearing curved metal parts similar to turbine blades were fixed to a base plate. These parts were ground.

c — The vanes were pressed to an axle by fives and wedged. The axles were balanced, so they stopped accurately in every position.

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[redacted] Comment:

1. Comparison of the present information with previous reports on the same plants shows that the names of the plants were not clear or had been changed. In the reports the Flugov Works No 117 and the Red October Plant No 466 are concerned. They are closely related in manufacturing, possibly under the same management.

2. Present information shows that the reconstruction of these plants which, according to another report started late in 1945, has not been completed. However, it is taken for granted that, aside from the continuation of the manufacture of E-motors, the manufacture of turbojet power units started in the plants in the Summer of 1947.

3. If the technical data are correct, the turbojet power units seem to be an original Soviet design based more or less on the German Heinkel-Hirth power unit. The estimated dimensions and data, however, must be accepted with reservations until further documents and statements give a definite idea of the situation.